US Army Corps
of Engineers

UPDATE FOR
Orange County

April 8, 2008

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO , FLORID

Site Chronology

1943-1948: Approx. 12,488 acres leased by Department of Defense

1997
Archives Search Report (ASR)

2004
ASR Supplement
Updated Risk Assessment

2005
Site Inspection (SI) Initiated

Patrick Air Force Base removes munitions at landowner's request

JUL 2007
Draft Final SI Report Complete

SI Public Workshop

Time Critical Removal Action (TCRA) Recommende

AUG 2007
SI Complete

TCRA Initiated at School & Mockingbird

Public and Homebuilders Meetings

Soil Testing, Surface Clearing & Temporary Fence Erected

SEPT 2007
Public Meeting

Mockingbird Investigation & Removals Begin

Restoration Advisory Board (RAB) Interest Meeting

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Site Chronology (continued)

Nov 2007

Lennar Finds (Nov 6th & 28th)

Warwick & Tivoli Gardens Meetings

TCRA Initiated in Tivoli Gardens

School & Mockingbird Investigation & Removals

Dec 2007

TCRA Initiated in Warwick

School and Mockingbird Investigation & Removals

Jan 2008

Tivoli Gardens and Warwick Investigation & Removals

School and Mockingbird Investigation & Removals

Warwick Meeting

Feb 2008

Remedial Investigation Feasibility Study (RI/FS) Contract Awarded

First RAB Meeting

Tivoli Gardens and Warwick Investigation & Removals

Mockingbird Investigation & Removals

March 2008

Tivoli Gardens and Warwick Investigation & Removals

Mockingbird Investigation & Removals

RI/FS TPP Meeting with Stakeholders

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Site Chronology (Future Activities)

- Warwick and Mockingbird Investigation and Removals Complete (April 2008)
- RI/FS Draft Work Plan (April 2008)
- Tivoli Gardens Investigation and Removals Complete (May 2008)
- Restoration Advisory Board Meeting (May 2008)
- Geophysical Investigation (Mapping) Begins (June 2008)
- FI/FS Complete (FY2009)
- Proposed Plan& Decision Document Approval (FY2010)
- Initiate Remedial Design (FY2010)
- Initiate Remedial Action (FY2011-2014)
- Long-Term Monitoring (FY2015-2036)
- Project Closeout (FY2036)

Site Orientation

Department of Defense Uses

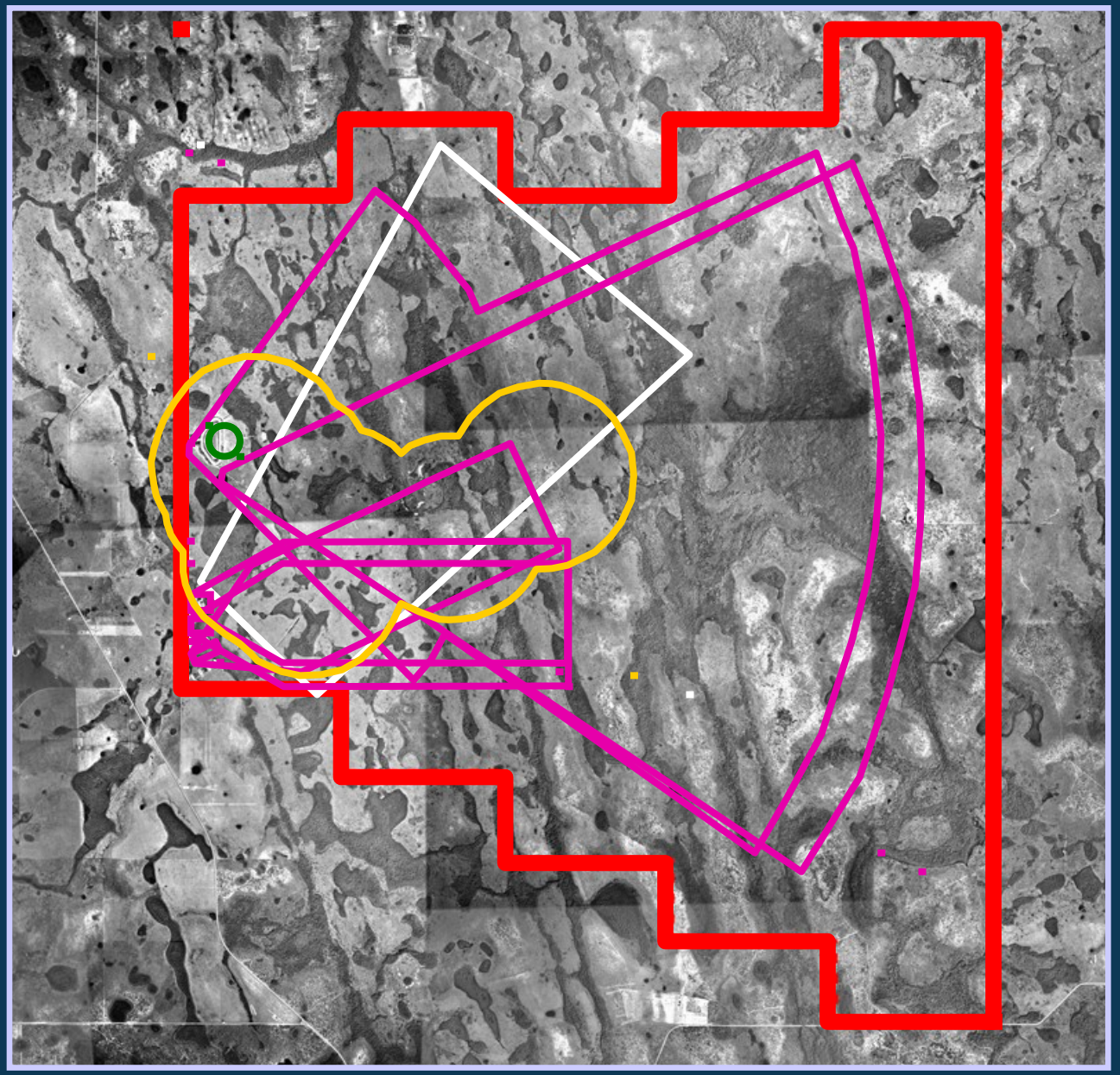
Ranges:

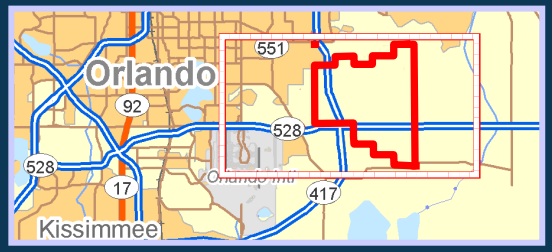
Chemical (incendiary, smoke) Demonstration

Rocket Range

Small Arms Range

Bomb Target

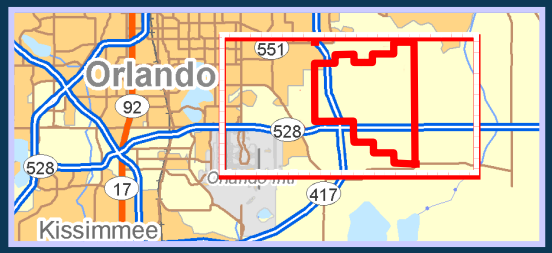


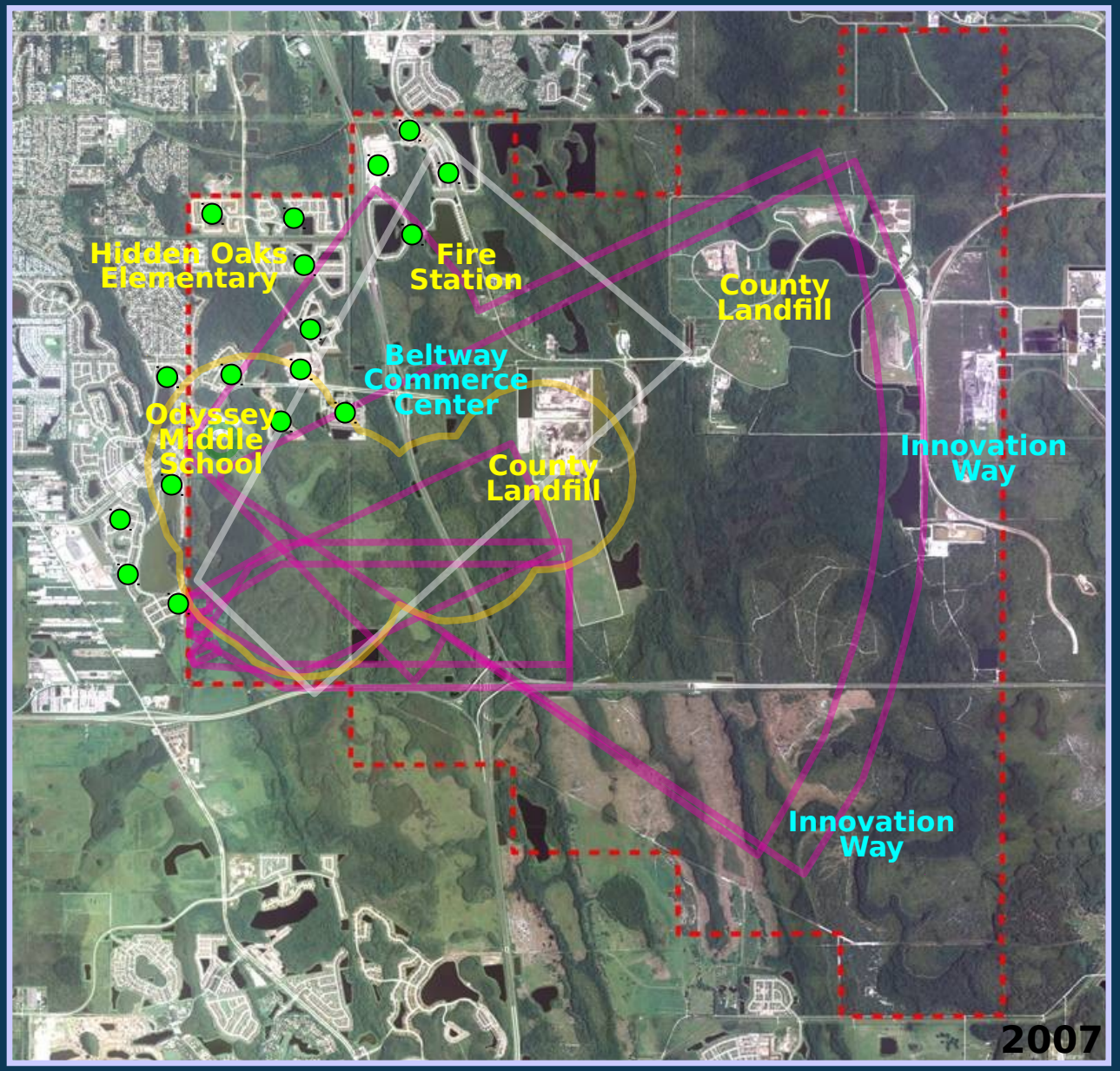


Current Site Conditions

Land Use

- 15+ Subdivisions and Related Homeowners Associations
- Public Uses
- Planned Large-Scale Development (Mixed-Use)





FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

Mockingbird LLC Property
4.2 inch white phosphorus mortar and munitions demolition
January 2008

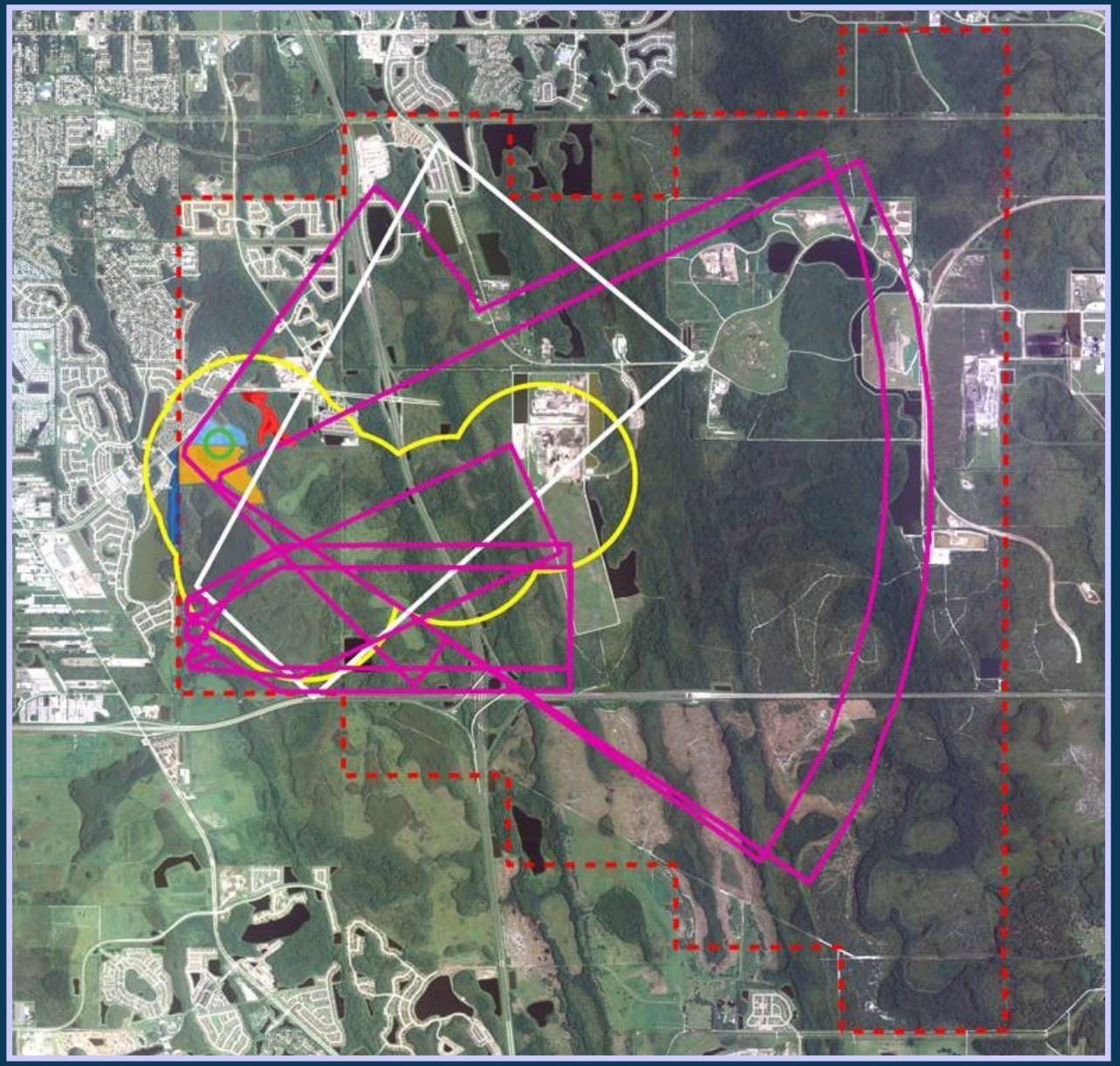
AREAS INVESTIGATED

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

FORMERLY USED DEFENSE SITES

Time Critical Removal Actions

- Odyssey Middle School
- Mockingbird LLC Property
- Tivoli Gardens Subdivision
- Warwick Subdivision



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

Time Critical Removal Actions

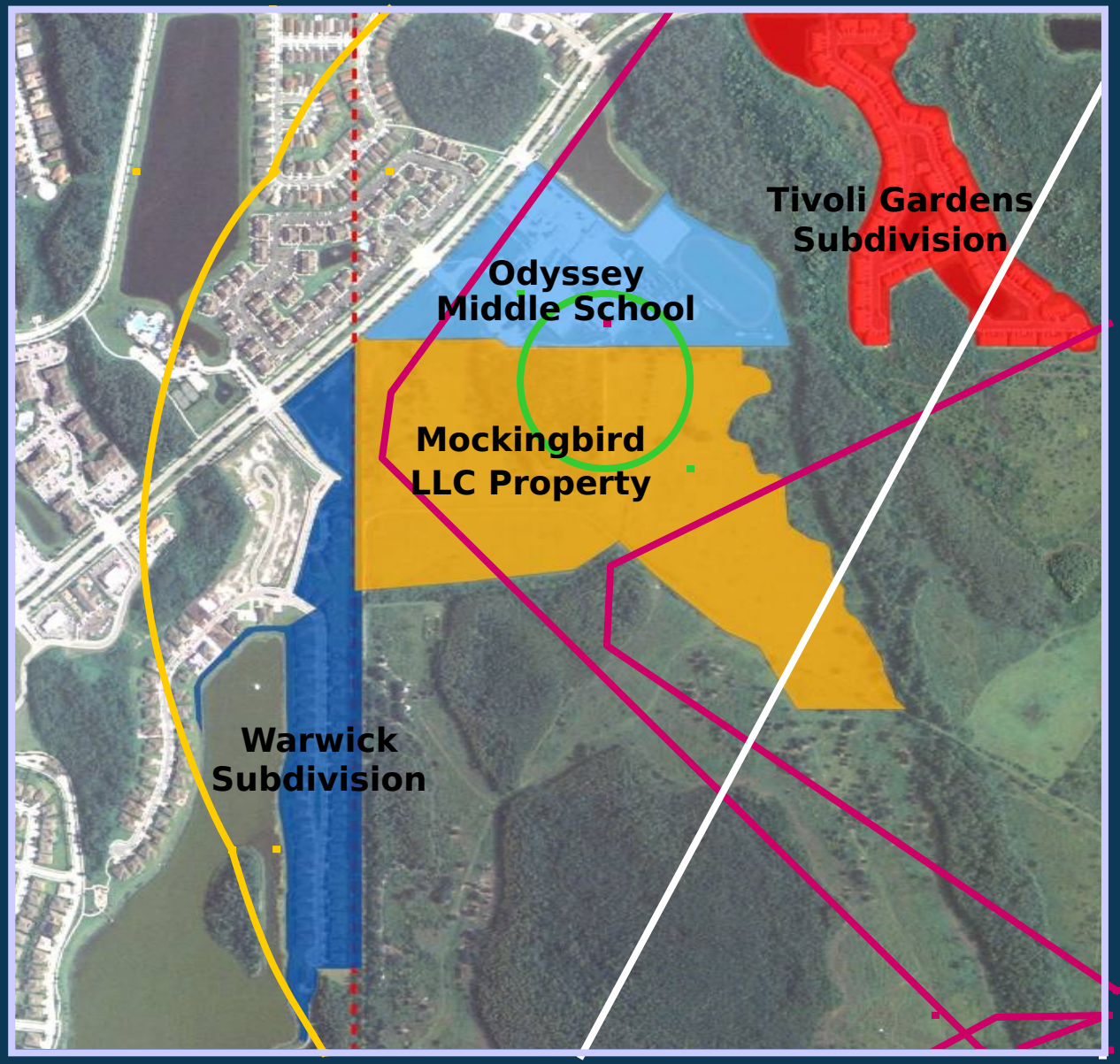
Ranges:

Chemical (incendiary , smoke) Demonstration

Rocket Range

Small Arms Range

Bomb Target



FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE

TCRA – Examples of Munitions Uncovered at Odyssey Middle School

Munitions Debris
(fragments or inert bombs)

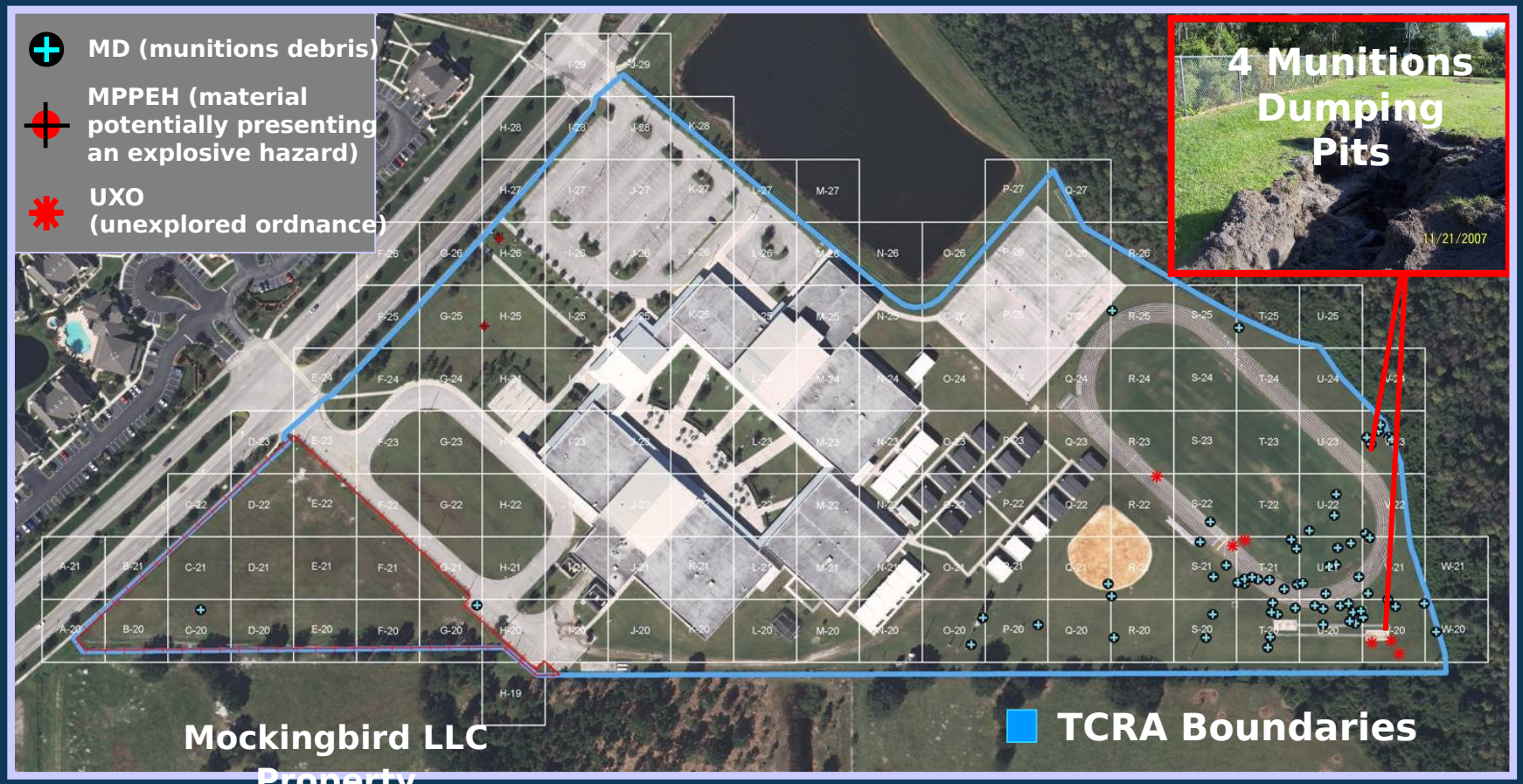
Live Munitions

TCRA Status

Odyssey Middle School

Start: 08/03/07

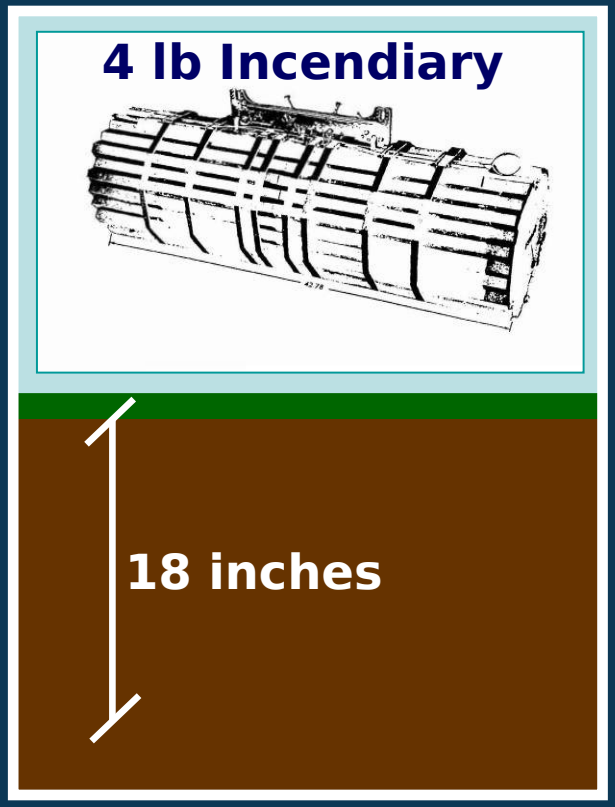
- 3 removal periods to accommodate school operations
- No surface munitions or surface munitions debris
- 2,515 targets investigated
- 126 munitions with high explosives destroyed
- 115 munitions debris items
- 14 tons of cultural debris removed
- Chemical analysis of soil samples completed – soils meet standards
- Track area restored



TCRA Summary – Investigation Concerns

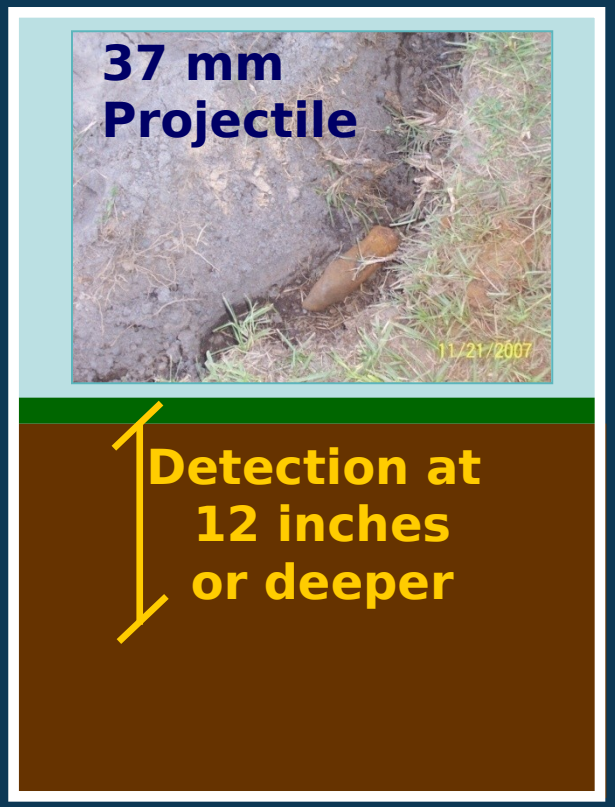
Odyssey Middle School

Current Target Threshold:



At Current Target Threshold:

Proposed Target Threshold:



Path Forward
Odyssey Middle School

- School property is safe in the absence of digging or other ground
  surface penetrating activities

- Odyssey Middle School grass and dirt areas will be investigated for
  37 mm projectiles to a depth of 12 inches, at a minimum (detection-level)

- Recommend school place digging restrictions on property requiring munitions construction support (examples: digging in grass, dirt or under structures; removing pavement)

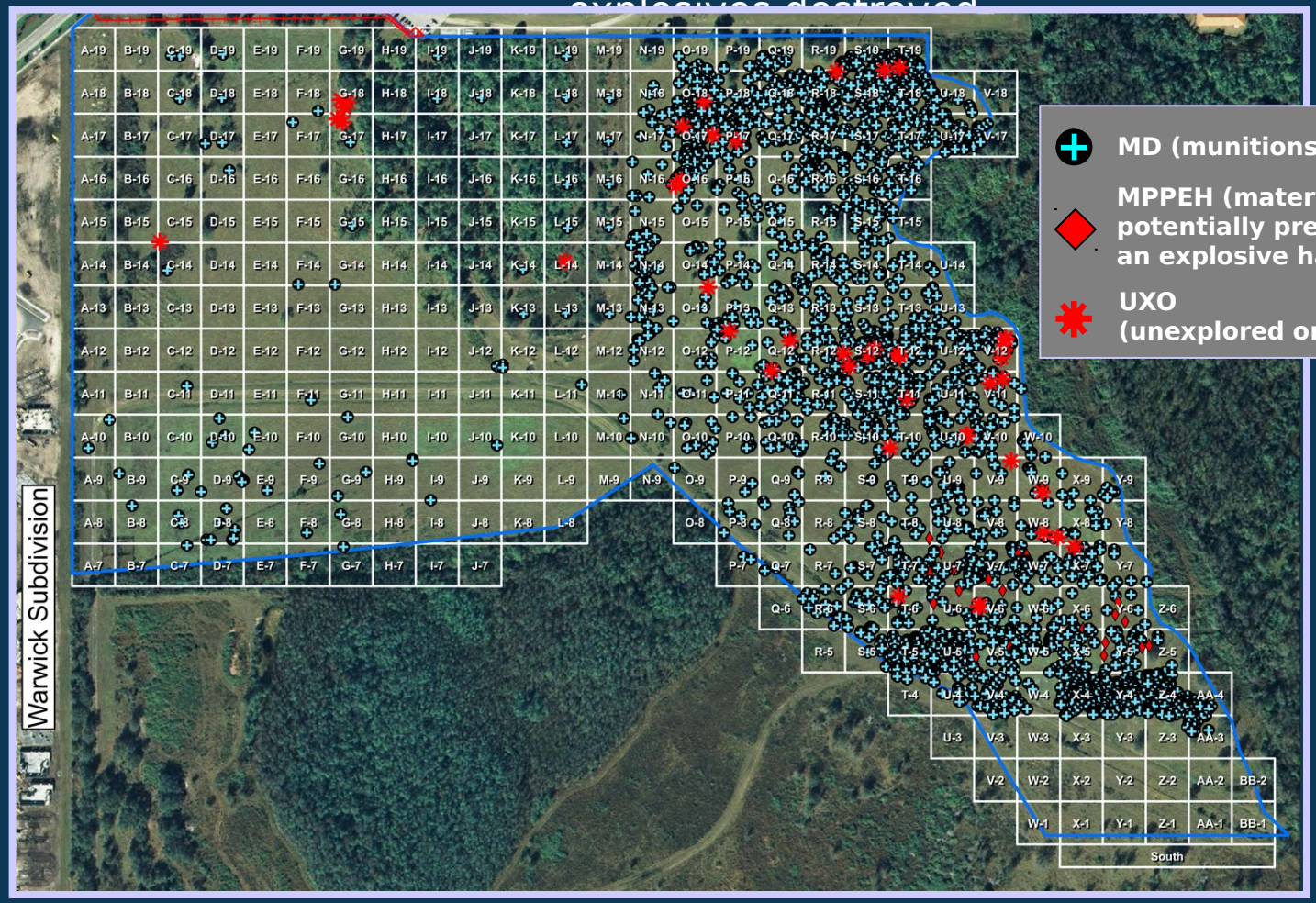
- Media informed of further investigation through coordinated effort

TCRA Status

Mockingbird LLC Property

Start: **09/02/07**

- 61 acres to be investigated
- 7,652 targets to be investigated
- 85 munitions with high explosives destroyed
- 4 tons of cultural debris removed
- 1540 munitions debris items

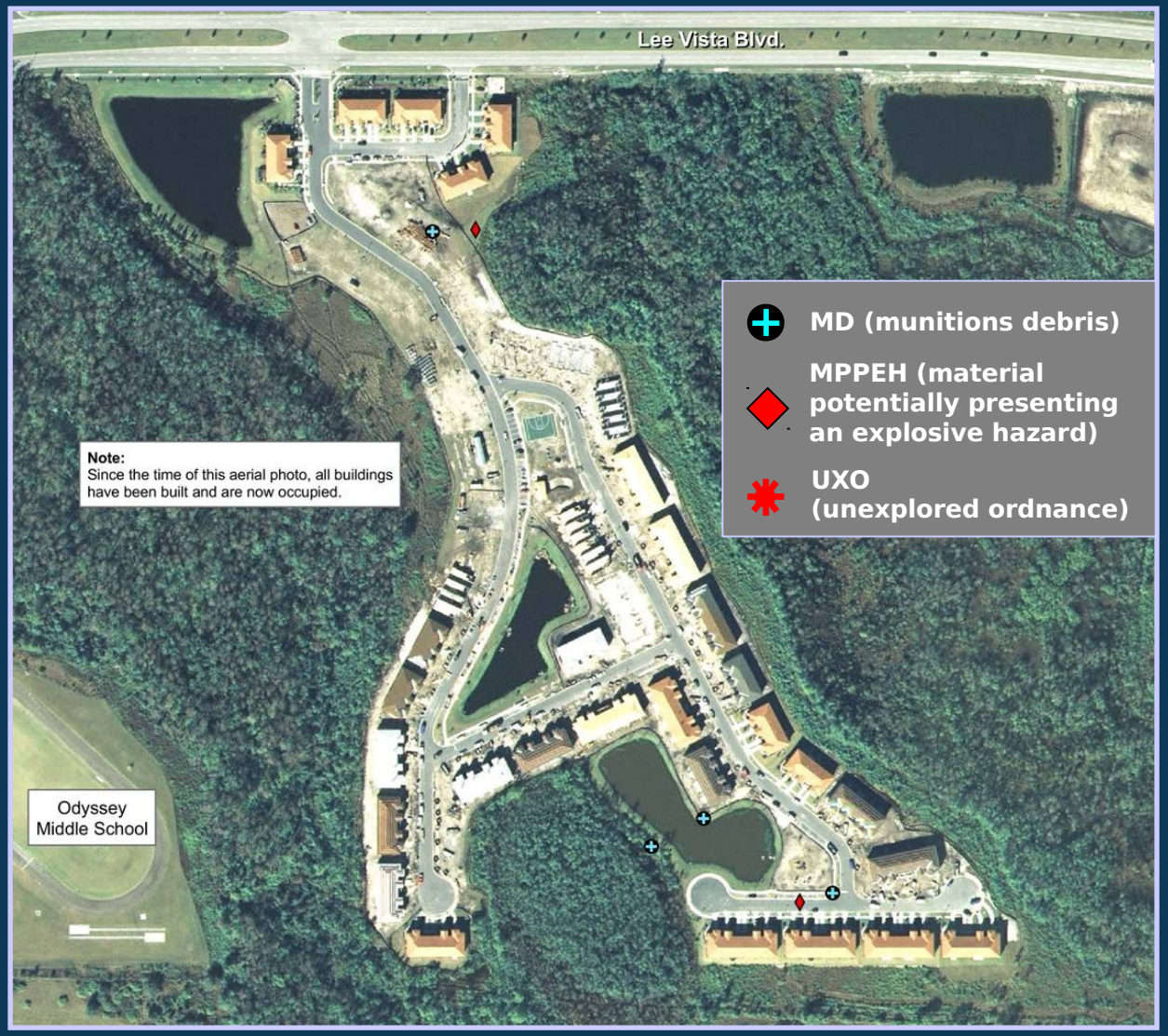


TCRA Status

Tivoli Gardens Subdivision

Start: 01/07/08

- Geophysical surveys for sub-surface ordnance (230 residences)
- 1,173 targets to be investigated
- 3 munitions with possible high explosives including an 23 lb frag bomb
- 10 munitions debris items found; and 36 mm, 75 mm, and 90 mm mortars
- .5 tons of cultural debris removed

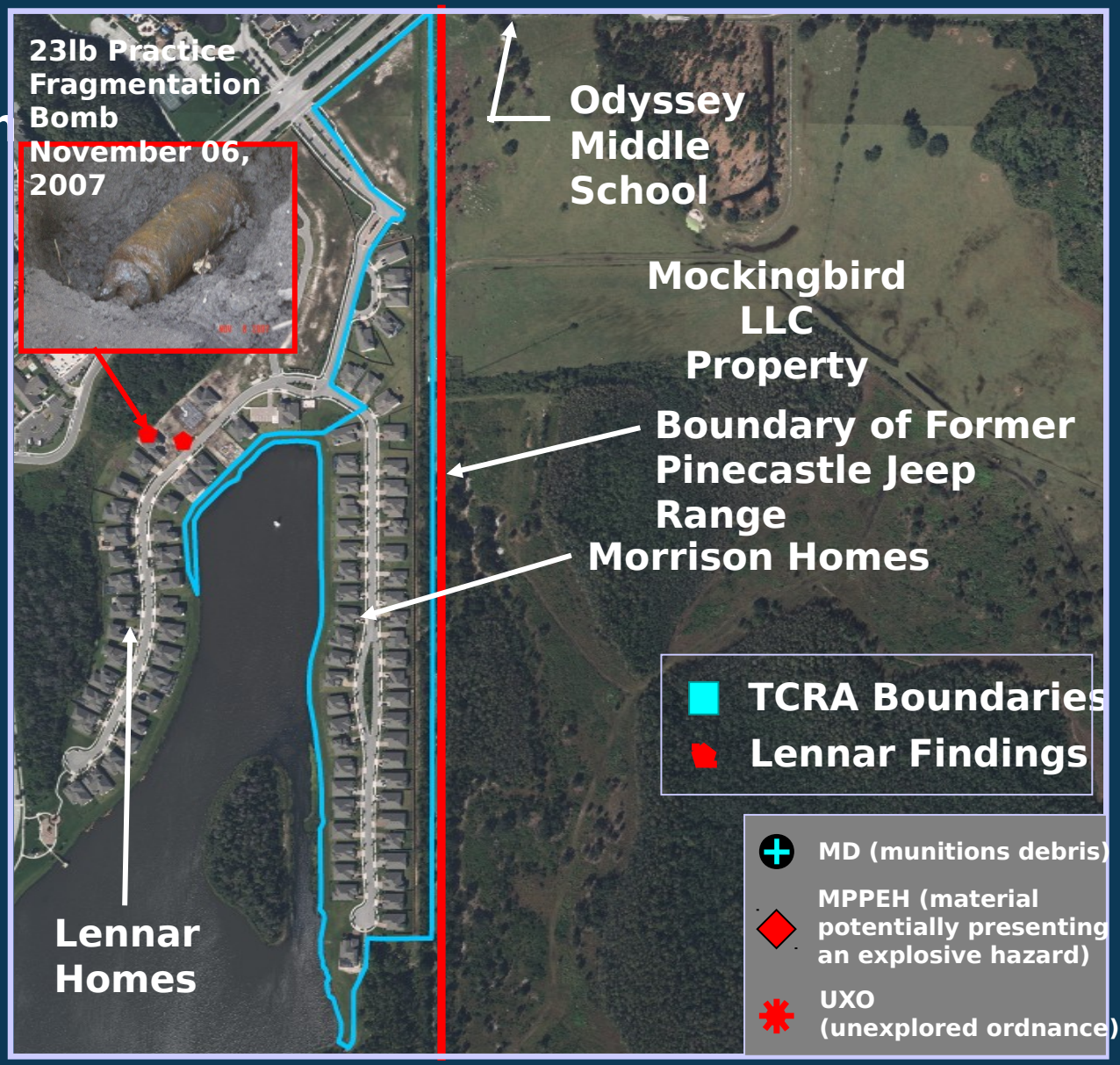

Lee Vista Blvd.
Note:
Since the time of this aerial photo, all buildings have been built and are now occupied.
Odyssey Middle School
MD (munitions debris)
MPPEH (material potentially presenting an explosive hazard)
UXO (unexplored ordnance)

TCRA Status

Warwick Subdivision

Start: Feb 2008

- Geophysical surveys for sub-surface ordnance in Morrison Homes portion just started (55 residences)
- 0 munitions with high explosives
- 0 munitions debris items
- .6 tons of cultural debris removed



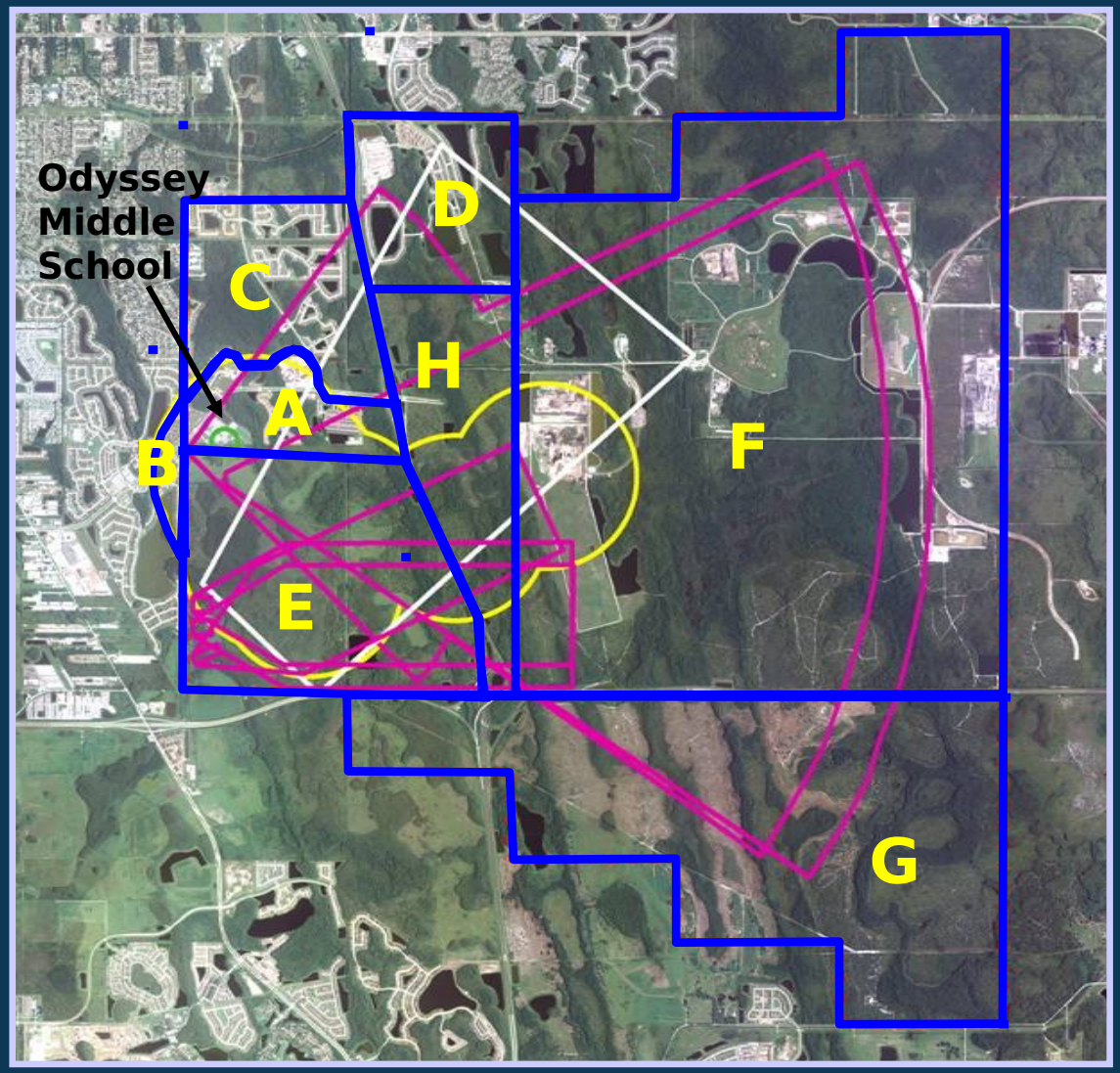
CERCLA Process

- FUDS Program has to follow the CERCLA Process
- TCRA for munitions removal actions only in response to hazards that pose immediate risk to people
- Site Inspection (SI)
  - Sample, research, analyze, & determine need for RI/FS
- Remedial Investigation/Feasibility Study (RI/FS)
  - Identify type of contamination
  - Identify extent of contamination
  - Identify remediation alternatives
- Proposed Plan
  - Identify recommended remediation
- Decision Document
- Remediation

RI/FS
Planning Basis

- RI/FS contract awarded February 28, 2008
- RI/FS Areas of Interest prioritized during government meeting in January 2008
- TPP meeting with stakeholders in March 2008
- RI/FS work plan review in April 2008
- RI/FS contractor starts investigation in housing areas in Spring 2008
- Decision Document will identify remedial actions for Areas of Interest

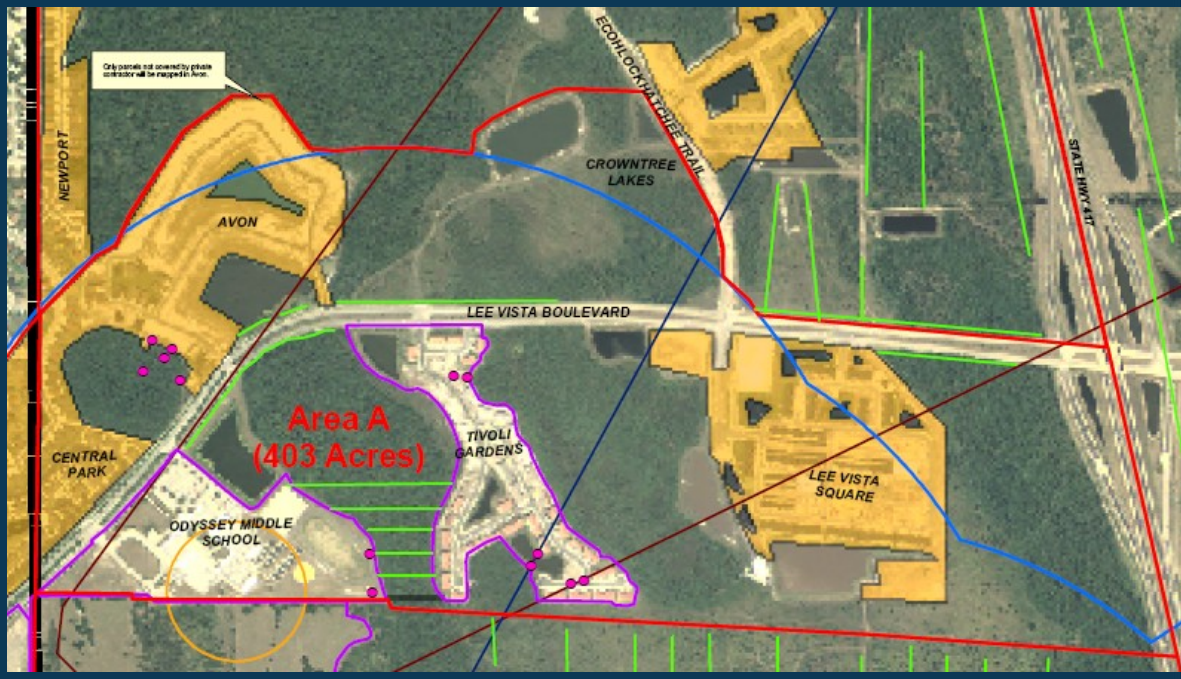
Areas of Interest A – D and part of F are first pri



RI/FS Objectives & Methodology

Objectiv e

No fear of access; site sufficiently remediated to support safe use



Methodology Area A (City)

- Complete geophysical mapping and digging of suspected munitions in housing areas
- 125’ transects in southern end of wetland between the school and Tivoli Gardens
  investigate path between school and Tivoli
- 125’ transects in wetland in arch of Tivoli Garden boot
- 250’ transects in undeveloped uplands and wetlands within bomb circle
- Transects on either side of Lee Vista Boulevard
- Soil Sampling where munitions found and where munitions debris is found in residential area

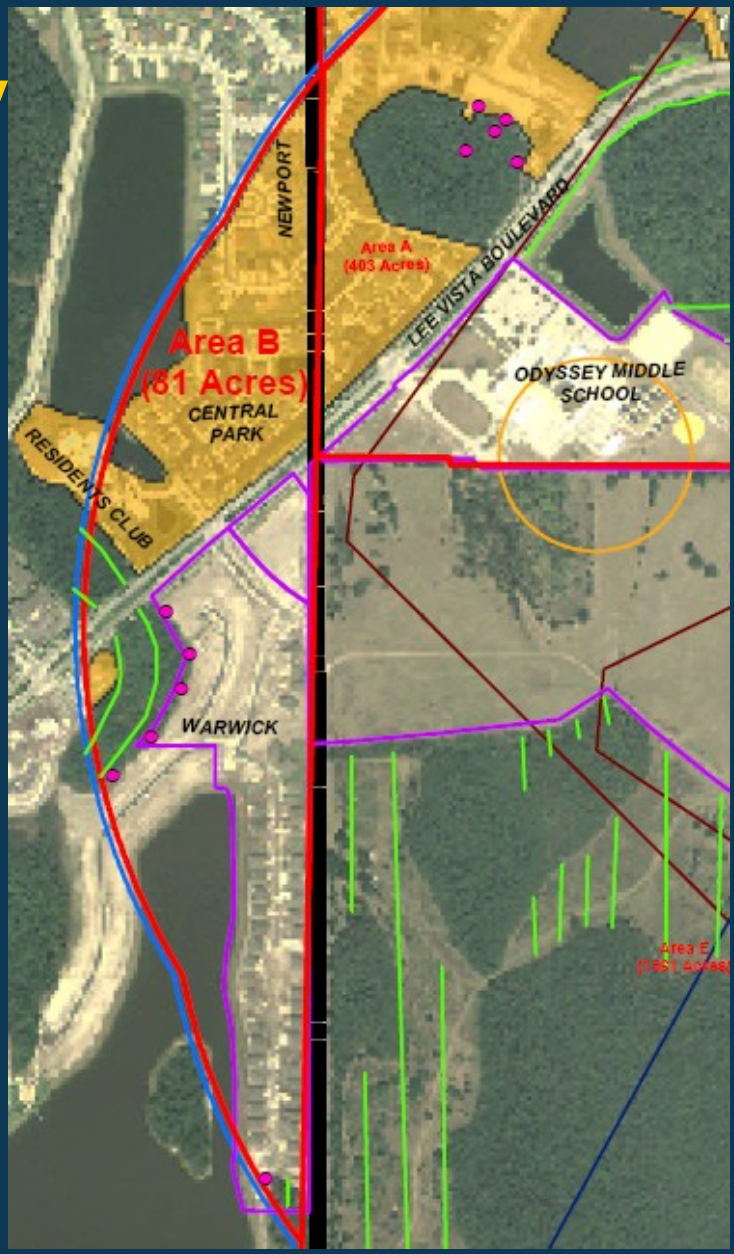
RI/FS Objectives & Methodology

Objectiv
e

No fear of access; site sufficiently remediated to support safe use

Methodology Area B (City)

- Complete geophysical mapping and digging of suspected munitions in housing areas
- Transect conservation area near Warwick and Vista Lakes Community Center
- Soil Sampling where munitions found and where munitions debris is found in residential areas



RI/FS Objectives & Methodology

Objectiv
e

No fear of access; site sufficiently remediated to support safe use

Methodology Area C (City)

- Complete geophysical mapping and digging 20% of suspected munitions in housing areas
- Complete geophysical mapping of school and digging 20% of suspected munitions
- 250’ transects in undeveloped upl
- Transect trails in wetlands
- Soil Sampling where munitions fou where munitions debris is found in residential areas

RI/FS Objectives & Methodology

Objectiv e

No fear of access; site sufficiently remediated to support safe use

Methodology Area D (County)

- Complete geophysical mapping and digging 20% of suspected munitions in housing areas
- 250’ transects in undeveloped uplands
- Leave wetlands undisturbed
- Soil Sampling where munitions are found and where munitions debris is found in housing areas

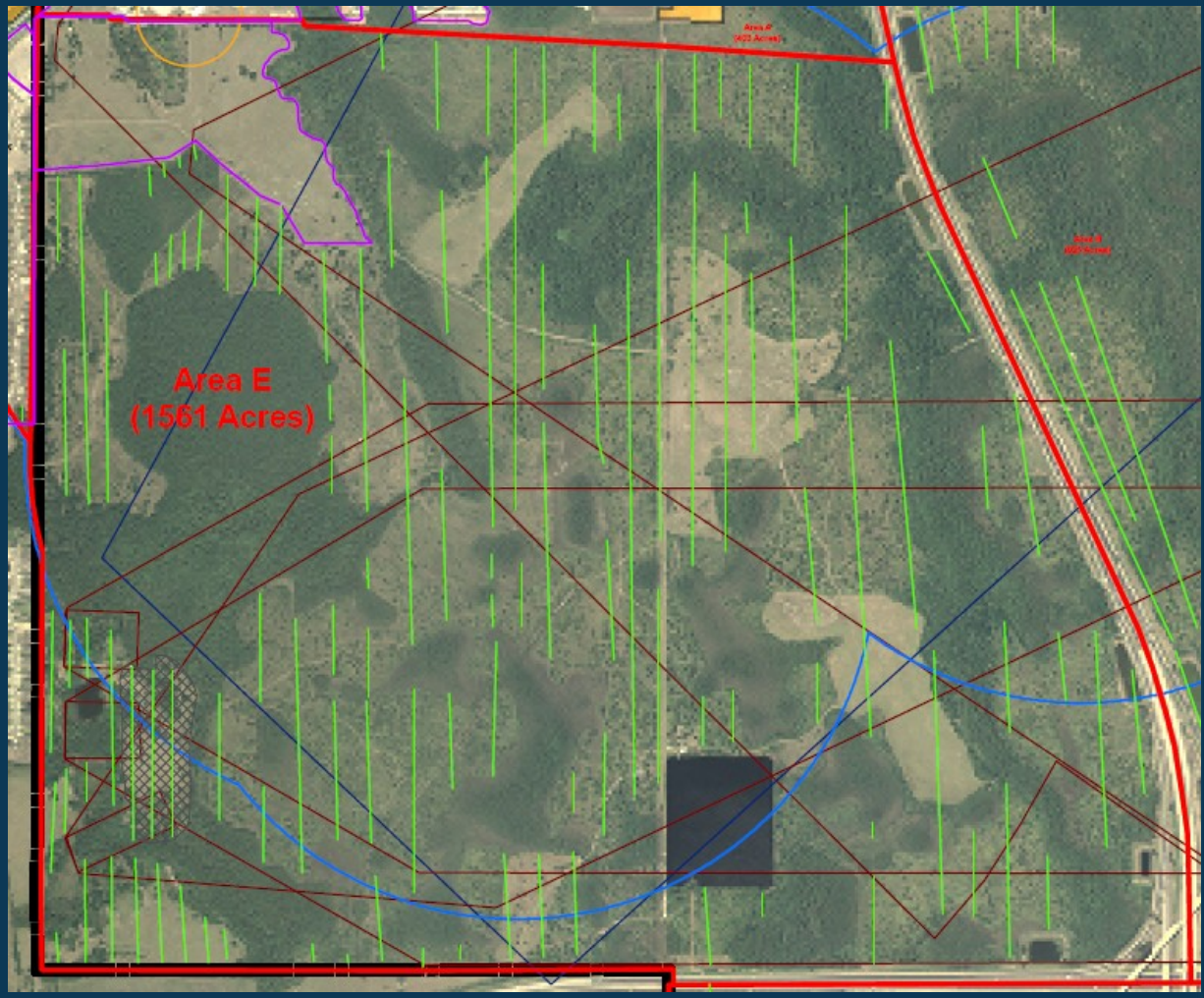
RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area E (City)

- 125’ transects in uplands
- Characterize wetlands
- Soil Sampling where munitions are found



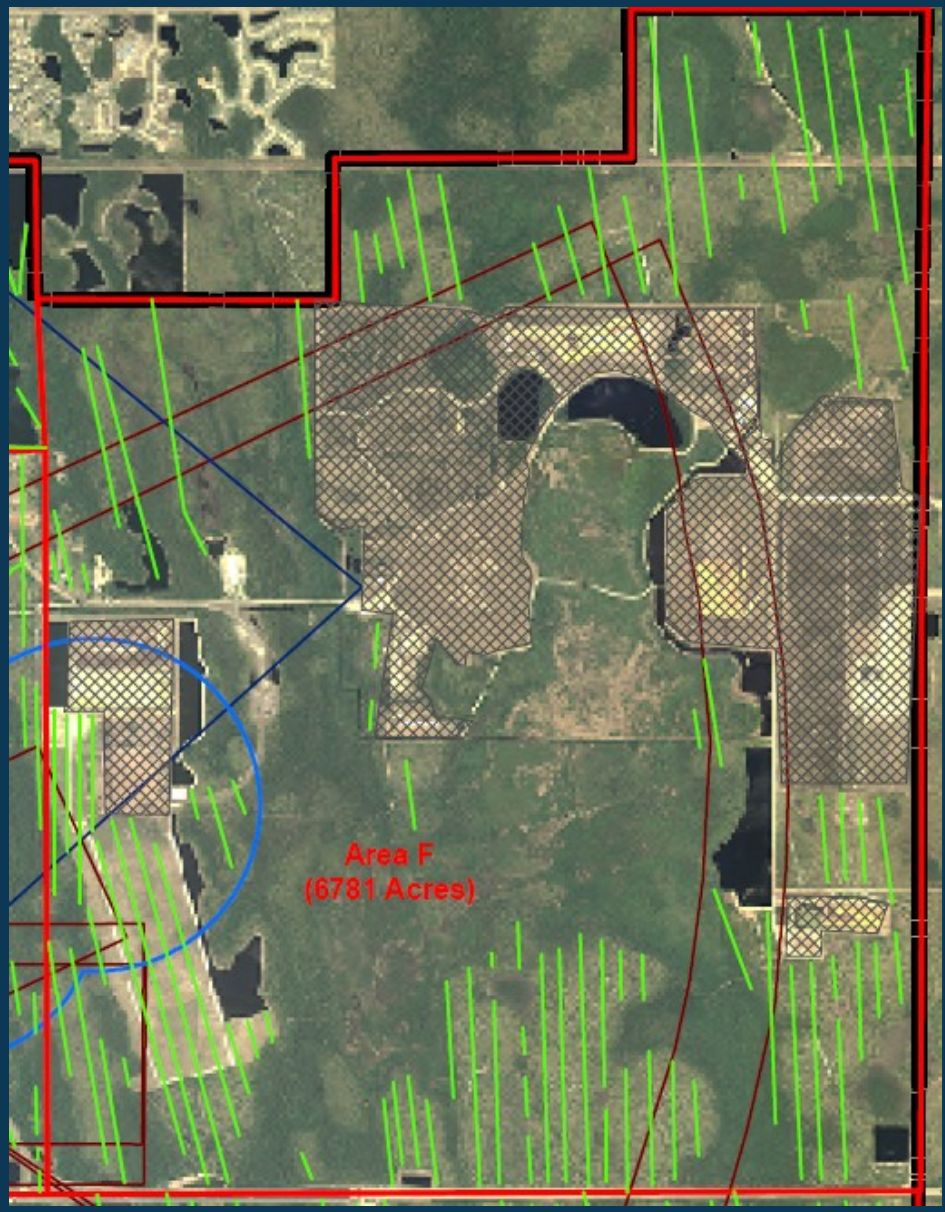
RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area F (County)

- 250' transects including in areas anticipated for borrow or future landfill expansions
- Characterize around wetlands
- Soil Sampling where munitions are found



RI/FS Objectives & Methodology

Objective

No fear of access; site sufficiently remediated to support safe use

Methodology Area G (County; northwest corner – City)

- 250’ transects in uplands
- Characterize around wetlands
- Soil Sampling where munitions are found

RI/FS Objectives & Methodology

Objectiv
e

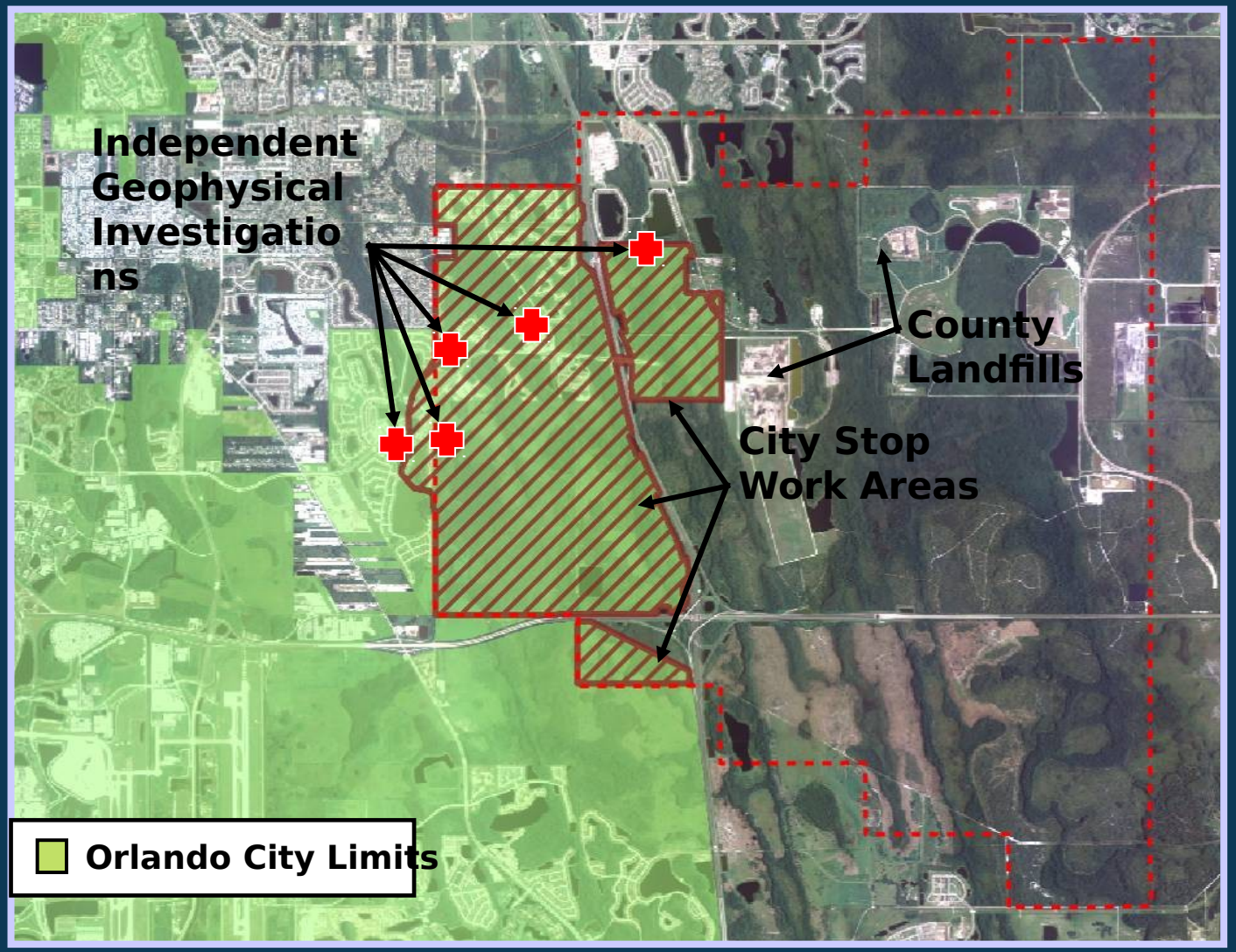
No fear of access; site sufficiently remediated to support safe use

Methodology Area H
(northern portion – City; southern portion – County)

- 250' transects in uplands
- Transects on either side of Young Pine Road
- Transects in lots in northeast corner
- Characterize around wetlands and conservation areas
- Soil Sampling where munitions are found

Actions by Others

- City of Orlando stop work order
- Independent investigations
- County landfill development
- County is proposing action



Odyssey
Middle School
DASA Site Visit
August 2007

PUBLIC INVOLVEMENT & COMMUNICATION PLA

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO , FLORIDA

Public Involvement and Communication Plan

Actively Engage the Community

Restoration Advisory Board

- Established in cooperation with state and local government
- Proactively recruited to ensure diverse representation
- First organizational workshop held February 2008
- Training to be provided for RAB members
- Anticipate involvement in RI/FS planning

Relationship Building

- Ongoing coordination with state and local government representatives throughout project life cycle
- Productive relationships established with homeowners associations
- Personal, one-on-one interactions with community members
- Regular on-site presence during operations

Coordination with Congressional Representatives

- Continue to provide periodic updates

Public Involvement and Communication Plan

Inform Community through Multi-media Sources

Interactive Communication

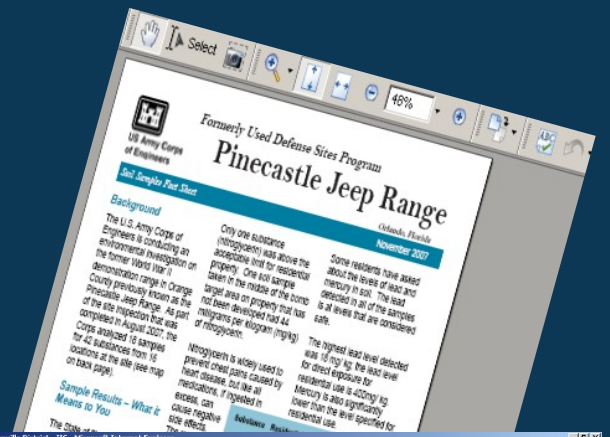
- E-mail subscription service and toll-free number established for direct communication
- Public meetings and public comment periods at appropriate points in CERCLA process
- Informal workshops and community meetings

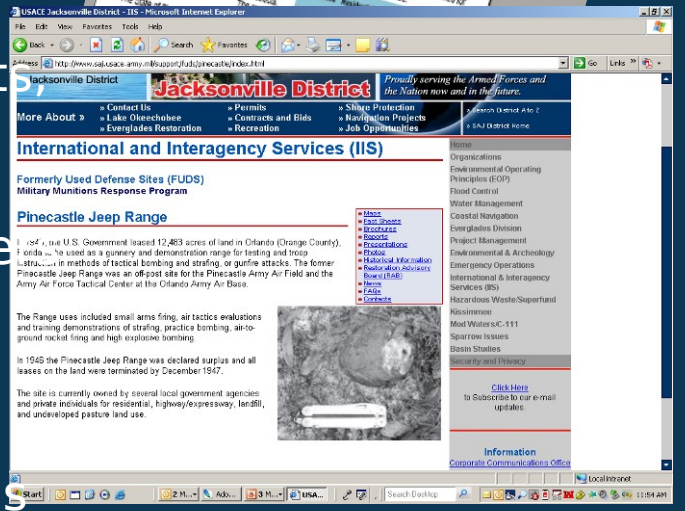
Information Access

- Information repositories at local libraries
- Project website with videos, photos, fact sheet historical documents, presentations, contact information and more
- UXO safety materials to school and homeowne

Media relations

- Ongoing news releases, media availability sessions,
interviews, news conference and editorial boards
- Appearances on local TV news shows
- Proactive sharing of project-related stories and information
- One-on-one meetings with local assignment editors




Jacksonville District
Proudly serving the Armed Forces and the Nation now and in the future.
International and Interagency Services (IIS)
Formerly Used Defense Sites (FUDS)
Military Munitions Response Program
Pinecastle Jeep Range

Restoration Advisory Board (RAB)

- Initial RAB meeting held February 26, 2008
- Approximately 60 people in attendance
- Community co-chair elected: Jim Shelton (homeowner)
- RAB membership includes 21 members of the community and representatives
 of the state, county and city
- RI/FS Public Meeting (March 27, 2008)
  - held as a joint TPP/RAB meeting
  - public is provided an opportunity to provide feedback on the RI/FS work plan
  - will have high media interest

DISCUSSION

FORMERLY USED DEFENSE SITES

PINECASTLE JEEP RANGE – ORLANDO , FLORID